

GROUNDWATER INVESTIGATION PHASE 1

TECHNICAL	
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	D STATE OF NEVADA
	D PROTESTANT
	E APPLICANT
	OTHER
	DATE 5-17-83

GROUNDWATER INVESTIGATION PHASE 1

Technical Report For The WHITE PINE POWER PROJECT

Prepared For

Los Angeles Department of Water and Power

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SUMMARY

The White Pine Power Project (WPPP) is a proposed 1500-megawatt coal-fueled, steam-electric generating facility to be located in White Pine County, Nevada. The project consists of two 750-megawatt units, with Unit 1 scheduled for commercial operation in mid-1989.

A water supply of 25,000 acre-feet per year (afy) is required by the WPPP for cooling purposes. The purpose of this report is to describe surface and groundwater resources in White Pine County which might provide such a supply and to establish a priority ranking of valleys for further more detailed investigations.

This Phase 1 report is a reconnaisance level report which relies on data and information developed by others. It will be followed by Phase 2 and Phase 3 studies in which a specific water supply plan will be developed. The key findings of this groundwater investigation are as follows:

Summary of Collection and Use of Available Data

Considerable data and information were gathered from various sources. Much of the data is tabulated and included in this report to assist other investigators.



Preliminary Ranking of Potential Water Basins or Valleys

Based on analysis, the ranking of the major seven valleys in White Pine County as a water supply source for WPPP is as follows:

- . Spring Valley (most likely water source)
- Steptoe Valley
- . White River Valley
- . Jakes Valley
- . Butte Valley (southern portion)
- Newark Valley
- Long Valley (least likely source)

Preliminary Percentage of Water From Various Sources

- a. Surface water resources are not available in sufficient quantities to constitute the entire supply for WPPP. Such resources have long been appropriated but could provide a partial water supply for the WPPP through purchase from either mining or ranching interests.
- b. A long term pumping rate of about 5000 afy or 20 percent of the annual requirement might be obtained from Kennecott's Deep Ruth mine and associated mine shafts.
- c. Analyses of groundwater level measurements from existing wells indicate that water levels are not declining and the